

CLAIMS

o 1. A method of regulating adenovirus packaging comprising the steps of:

5 a. obtaining an adenovirus vector containing a repressor binding site;

b. propagating said vector in the absence of said repressor; and

c. repressing packaging of said vector in the presence of repressor.

10 2. The method of claim 1 wherein the repressor is COUP-TF.

15 3. The method of claim 1 wherein the repressor is lac repressor.

20 4. The method according to claim 1 wherein the propagating step occurs in a first cell line and the repressing step occurs in a second cell line.

25 5. The method of claim 1 wherein the repressing step occurs in a cell line is coinfecte with a vector expressing the repressor.

30 6. An adenovirus vector comprising an adenovirus packaging sequence containing a plurality of COUP-TF binding sites.

35 7. An adenovirus vector comprising an adenovirus packaging sequence having at least two copies of 5'-TTTGN<sub>8</sub>CG-3' (SEQ ID NO:1) and a plurality of COUP-TF binding sites.

8. An adenovirus vector according to claims  
6 or 7 further comprising a heterologous gene for  
expression in a host.

5 9. A method of treating patients comprising  
the step of:

10 administering an adenovirus vector that  
was prepared using the adenovirus vector of claim 8  
wherein the heterologous gene expresses a  
therapeutically effective amount of a protein.

15 10. An adenovirus vector containing a  
packaging signal sequence consisting of at least two  
copies of 5'-TTTGN<sub>8</sub>CG-3' (SEQ ID NO:1).

20 11. An adenovirus vector according to claim  
10 wherein a repressor binding site is embedded in the  
packaging signal sequence.

25 12. An adenovirus vector according to claim  
10 wherein repressor binding sites flank the packaging  
signal sequence.

13. An adenovirus vector according to claim  
10 wherein repressor binding sites alternate with the  
packaging signal sequence.

30 14. An adenovirus vector according to claim  
10 having 3-12 packaging signal sequences.